

## TESIS^ APPROVAL STATUS FORM

JUDUL: OUTGOING GOODS MANAGEMENT SYSTEM

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^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

# **OUTGOING GOODS MANAGEMENT SYSTEM**

**MOHD FAZALI BIN MOHAMAD YATIM**


This report is submitted in partial fulfillment of the requirements for the Bachelor of Information and Communication Technology (Software Development).

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA  
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**ADMISSION**

I admitted that this project title name of  
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citations.

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## ACKNOWLEDGEMENT

Projek Sarjana Muda (PSM) is compulsory for undergraduate students of KUTKM and all undergraduate are needed to pass it before graduated. Through this project, the students will be able to enhance their ability and skills in literature research, analyzed problems, propose alternative solutions or models and manage available resources in accomplishing the project and present the output effectively.

My deepest gratitude and appreciation to my supervisor, Mrs.Noraswaliza Binti Abdullah for showing me guidance, kindness, patience, care and friendship throughout PSM. She is always willing to help whenever I run into problems and had taught me a lot to complete this project.

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Finally, this project had giving me the opportunity to learn a lot of knowledge that are not studied before. I have use a lot of technology and technique to develop this project. I hope this project will help the society in the future.

## ABSTRACT

Outgoing Goods Management System is a system that provides function to manage and enhance the process of managing outputs. Features such as assets tracking and sorting is the key feature that acts as a Decision Support System. OGOMS also centralize outputs between departments and produce accurate output throughout production process. This in purpose to eliminate redundancy in recording of data, which will cause problem in delivery. The purpose of research, particularly literature review is to collect data. Through this literature review, scope of project and user requirements can be retrieved. The use of a methodology helps to produce a better quality product, in terms of documentation standards, acceptability to the user, maintainability and consistency of software. Waterfall Model has been chosen as a methodology for this project and will be implemented along the system development process to ensure the objectives of the project can be fulfilled. The project consists of three modules that enable tracking, sorting, and manipulation of records. With the latest and powerful technology, the system is not only expected to be workable, but also highly efficient in terms of execution speed and stability.

## ABSTRAK

*Outgoing Goods Management System* adalah sebuah sistem yang membekalkan fungsi untuk mengurus dan meningkatkan proses pengurusan output. Ciri-ciri seperti pengesanan aset dan fungsi carian adalah kunci kepada ciri-ciri yang bertindak sebagai Sistem Sokongan Membuat Keputusan. OGOMS juga mengetengahkan output diantara jabatan dan menghasilkan output yang tepat sepanjang proses penghasilan. Ini bertujuan untuk mengurangkan tindakan dalam merekodkan data yang akan mengakibatkan masalah dalam penghantaran. Tujuan kajian adalah bertujuan untuk mengumpul data. Melalui kajian pemahaman, skop projek dan keperluan pengguna dapat diperolehi. Penggunaan methodology membantu untuk menghasilkan produk yang berkualiti dari segi piawaian dokumentasi, penerimaan pengguna, penyelenggaraan dan perisian yang konsisten. Model air terjun dipilih sebagai methodology untuk projek ini dan akan diguna pakai seiring dengan proses pembangunan untuk memastikan tujuan projek tercapai. Projek ini terdiri daripada tiga modul yang membolehkan pengesanan, pencarian dan manipulasi dilakukan ke atas rekod. Dengan teknologi yang berkuasa dan terkini, sistem ini bukan sahaja dijangka dapat berfungsi malah cekap dari segi pelaksanaan dan kestabilan.

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Preamble / Introduction**

Nowadays information plays an important role in almost every sector, for example industrial sector; information depicting their daily business transaction such as daily output, income and customer orders are very crucial because it enable them to track and monitor their progress and production targets.

Outgoing Goods Management System (OGOMS) is a system developed specially for Guolene Woven Product company which used for monitoring record their production. For factories that divide their production into few departments and use manual method of recording business processes, OGOMS will help them to synchronize their production with proper recording process and monitoring system.

When applied to business process of a factory, OGOMS is capable to enhance productivity, information flow, and eliminates error in recording. By incorporating friendly interface and sufficient documentation users in each department will find

OGOMS is easy to use, thus making them gain full control over their data and customizes themselves to suit daily business transaction. Staff can carry out daily task conveniently like checking daily output, product information and acquire simplified records.

The methodology that will be used for this project is waterfall model. The waterfall model is an efficient software process model combined with prototyping model progressing AUT(application under test) will develops desirably.

## **1.2 Problem Statement**

Guolene Woven Product Sdn. Bhd. is the reference of the project. It is a company that produces large amount of woven products such as sacks and insulation product. Currently the company does not have an automated way of recording and retrieving information of their production process. Most works are done manually and still using paper to store and record business data. This leads to inefficient and waste of time that affect the overall working flow. In term of data storage, stored data are prone to be lost and data gathered aren't helping management (administrator) in managing and comparing product progress. In this company report and other meaningful information are hard to generate and gather due to manual operation. Delayed or incomplete orders also are hard to detect via manual recording process.

By developing the system, it is become the main target for the automated mechanism of the system can help administrator and user to have access to meaningful information and manage their orders more efficient, thus eliminating the complexity of managing records by using paper (manual method).



### 1.3 Objectives

OGOMS is a system that developed to enhance business process or solve the problem that depicts outgoing goods and how they are handled. As problem stated above, few objective have been identified and they are:

- i. Monitor/ensure outputs from different department are synchronized.
- ii. Facilitates the recording process done in each department production. Automates the searching and storing process depicting daily business transaction of the industry.
- iii. Produce meaningful reports of daily transaction.
- iv. Generates a tracking procedure that enables user to track orders that have not fulfilled or ongoing processes.
- v. Store all transaction that happens daily without any data redundancy and able to generates transaction report.
- vi. Track and records processes that occurred in selected domain.
- vii. Produce filing system that could be sort and arrange systematically.

### 1.4 Scopes

Outgoing Goods Management System (OGOMS) is targeted to be used in a factory that still using conventional way of recording and filing of their daily business processes. Personnel such as administrator or supervisor of each department will use this system to key in the production outputs or any related information for each department and each department will have authorized person to access this system. The system has the flexibility to be altered and used in warehouses and any organization that required monitoring and proper recording to gain absolute control of their goods.

In this project module acts as a limit or constraint to overall system capability. This project is divided to three set of main component or module, among the module that consist in this project are:

**Table 1.1: Project Scope**

<b>User</b>	<b>Modules</b>	<b>Description</b>
Public	View Product Information Login View Report	<ul style="list-style-type: none"> <li>Module used to gives staff privileges to view precious information.</li> </ul>
Administration	View Edit Records. Add User Generate Report Search records	<ul style="list-style-type: none"> <li>Receive input from user, input are data on production order, progressing process and etc.</li> <li>Input are stored in repository and used by administrator module for monitoring purpose.</li> <li>Interfaces contain common basic function such as add, save, delete, find etc.</li> </ul>
Administration	Tracking	<ul style="list-style-type: none"> <li>Generate report and tracking procedure that acts as a decision support system to help facilitate report and search generation.</li> <li>Tracking module will determine whether or not an order contain excess or shortage.</li> </ul>

## 1.5 Contribution

This project can help staff perform tasks such as product maintenance efficiently. Capability such as add, delete, update records provide better records handling compared to conventional way (manual record). At the same status checking can be done almost immediately.

Administrator may also use the system to view the status of production as long as other department provides input of their department production. This feature enable administrator to keep track of on going process and avoid any delay or problem in fulfilling client's order. Through the system, status of progressing product can be identified immediately.

Via this system, information can easily be access on-line through web browser and without major network configuration staff in this company can access and view related information. Overall the system provide more control and effectively handling data compared to conventional method which used paper as their main recording medium.

## 1.6 Expected Output

Upon completion of the system, OGOMS is predicted to be able to provide more efficient and effective method in monitoring, storing and manipulating data acquired from daily business process. Features such as form, report and sorted data viewing, status monitoring and data manipulation are hope to ease the company daily business process.

To use the system, staffs are required to do a simple user registration with the company-authorized personnel to gain access to numerous features in the system. For ordinary user, viewing the status or order and product can be done with ease but without any power on modification and gaining more detail information.

Searching and viewing records according to the records priority will help user to view information that show the status and progress of the orders. This helps to save time on sorting records manually and avoid accidentally left out important dateline.

As a conclusion, this system, which built on Apache-PHP server, is meant to ease user of the targeted company to maintain while improving their daily business processes in monitoring and managing records of their mass production orders.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Literature review is an important chapter in this project as it is a research study of the system that is going to be developed. The studies include the currently operating system; what technology used, how certain method are applied to this kind of tool, network programming and their architecture and other technology that employed. In addition, literature review will also review the strengths weaknesses in the existing systems. A comparison will be done between existing systems and the suggested tool. Through this study, the developer would be able to gain more knowledge and understanding in developing a new system. As a result, developer would be able to improve the weaknesses and integrate the existing strengths and produce a better system.

Before starting developing the system, research of literature is essential to identify the user requirement regarding the functions in the system. During this phase, developer had used several methods to get user requirements.

This system will be developed for Goulene Woven Industry Sdn. Bhd. their requirements are very important to make sure it is really help them to conduct the task. Hence, interview with these company to clearly understand their requirement and obtain idea from them to develop the system.

After carry out research throughout Internet, developer discover that their requirement can be fulfill by building a system that that could deliver all the functionality described in earlier chapter. The system that runs as a web based application will be integrating web programming languages such as JavaScript, VBscript and PHP and also databases such as MySQL. After deep consideration made to the choice of programming language, developer has decided to use combination of internet programming language and MySQL database. It is due MySQL's higher capacity of records while Internet programming could deliver ample flexibility and scalability for developed application.

Besides this finding the information gathered through reference of books is an effective way to help developer understand the concept of the technology, architecture of system and strengthening the programming language.

Throughout this research, developers have gather information and user requirements about the needs of a systematic system to help the staff in handling their tasks. With these requirements, Decision had been made is to build some functions in system to solve their problems.

Preliminary requirements and scopes can be retrieved from the research. Scope defines the size of the project, estimate the time and budget for system development and prepare a schedule or timetable to complete the project.

Apart from this, developers also understand the concept of the network programming, network architecture and database manipulation.

Each source will provide different information and facts depending on the keyword or phrases used to obtain the information. Information can be obtained from system users through survey and questionnaires, the Internet, books, review of existing systems, and so on. For the gathering of information to develop OGOMS, the resources include electronic media, printed media, survey and questionnaires, and guidance from the lecturer.

The Internet, one of the main electronic media today, provided bundle of information regarding methodologies for the system development, information about the most suitable hardware and software to use, and development tools, besides that, few other system alike were reviewed in order to specify the necessary requirements for the Suggested project. Various search engines were used in the process of gathering the information namely Google, Yahoo, Metacrawler and Dogpile. The specific keywords used for the search would depend on the type of information that required.

A survey was carried out to gather information from the end-users. The survey was done staff of the organization. The result from the survey was analyzed and will be taken into consideration when developing the system.

Besides all of the above sources, precious information were also gathered from the guidance of supervisor, Mrs. Noraswaliza Abdullah.

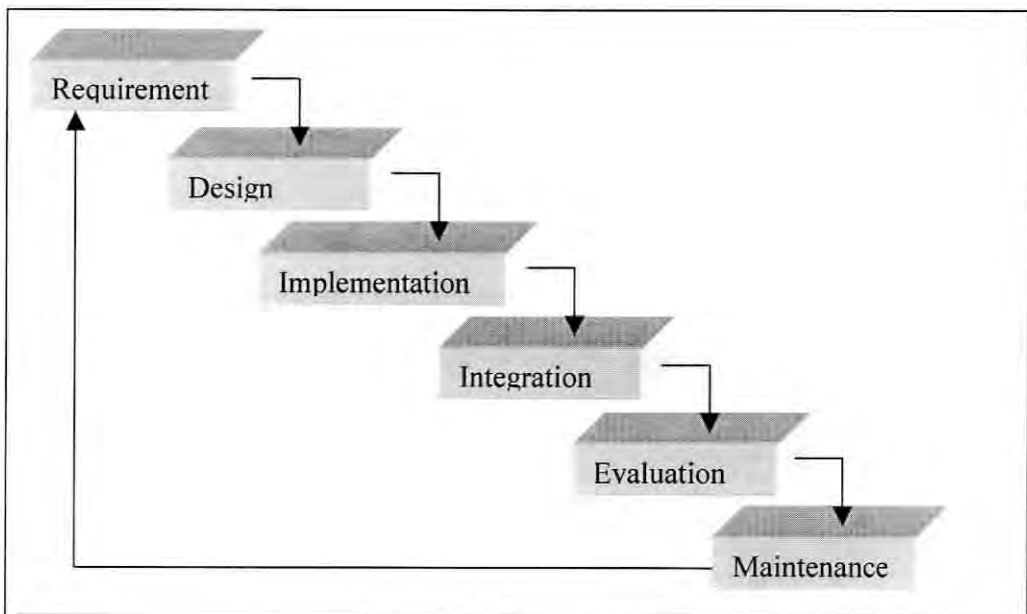
### 2.2.1 Case Study

### 2.2.2 Research Of Methodology.

Methodology can be define as a collection of components that include procedures, techniques, tools and documentation aids which intended to help the developer to develop the system. Normally, the Waterfall model or Spiral model will be use in the software development life cycle. Below are the explanation of Waterfall Model and Spiral Model.

#### i. Waterfall Model

The waterfall method is a way of describing the 'systems life cycle'. Each phase in waterfall life cycle is completed in sequence and then the results of the phase flow on to the next phase. There is no going back once a phase is completed. The figure below is represent each phase in waterfall model.



**Figure 2.1: The Waterfall Model**